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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,388	06/13/2001	Yoshikazu Shingu	SHC0131	5198

7590 10/05/2004
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EXAMINER

ANDERSON, CATHARINE L

ART UNIT PAPER NUMBER

3761

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880,388

Applicant(s)

SHINGU ET AL.

Examiner

C. Lynne Anderson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kline et al. (5,957,908).

With respect to claims 1, 3, 4, and 6, Kline discloses a disposable diaper 20, as shown in figure 1, comprising a topsheet 24, a backsheet 26, a liquid absorbent core 28, a front waist region 46, a rear waist region 44, a crotch region 48, and wings 62 and 64 formed on the rear portion and extending outward. Fastener sections 30 are formed on the wings 62 and 64 and extend outward, the fastener sections 30 having male fasteners formed on and extending from their inner surfaces, as shown in figure 7. The wings 62 and 64 comprise a nonwoven fabric made of thermoplastic synthetic fibers, as disclosed in column 15, lines 29-67. A plurality of fine fusion spots 250 are formed on the wings and arranged such that there is a greater number of fine fusion spots 250 per unit area in the outer side regions 253 of the wings 62 and 64 than in the inner regions 254. The plurality of fine fusion spots 250 are formed by heat or pressure bonding, as disclosed in column 16, lines 28-29. Fine fusion bonds formed by these methods will inherently leave fine fusion spots on the exterior

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surface of the wings, since the application of heat or pressure to the wings to form the bonds will alter the exterior surface of the wings in the process. The area comprising the greater number of fine fusion spots 250 comprises the area extending from the inner transverse edge of the male mechanical fastener strips 30 inward over a transverse distance that is at least equal to the width of the male mechanical fastener strips 30, as shown in figure 7. Kline discloses the wings 62 and 64 being made of a laminate of two layers, where the layers are bonded at spots 250 using methods such as heat, pressure, or ultrasound (column 16, lines 28-30). It is the examiner's position that it is impossible to laminate two sheets together using a heating method, pressure method, or ultrasonic method from a non-exposed surface, or from the inside. It is therefore inherent in the method of fusing that when laminating two pieces of material using heat, pressure, or ultrasonic means, the fusion spots must be formed on the outside surface of at least one of the layers.

Kline does not, however, expressly disclose that the fine fusion spots are located on the inner exposed surfaces of the wings. At the time the invention was made, it would have been an obvious matter of design choice to one of ordinary skill in the art to have the fine fusion spots on the inner exposed surfaces of the wings because the applicant has not disclosed that having the fine fusion spots on the inner exposed surfaces of the wings solves any stated problem or serves any particular purpose. One of ordinary skill in the art would furthermore have expected Applicant's invention to perform equally well with either the fine fusion spots disposed on the outer surface or the claimed inner

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surface, as the fine fusion spots of both Kline and the instant invention serve the same purpose and perform the same function of providing increased strength and stiffness in areas of the bonds. It would therefore have been an obvious matter of design choice to modify Kline to obtain the invention as specified in claim 1.

With respect to claim 2, the outer regions 253 of the wings 62 and 64 have a higher density of fine fusion spots 250, as shown in figure 7, and therefore are stiffer than the inner regions 254.

With respect to claim 5, the outer side region of the wings 62 and 64 may be defined as having a width equal to the width of the male mechanical fastener strips 30.

Response to Arguments

Applicant's arguments filed 8 June 2004 have been fully considered but they are not persuasive.

In response to the applicant's argument that Kline fails to disclose fine fusion spots located on an exterior surface of the wings, it is noted that the wings of Kline are bonded by heat or pressure, as disclosed in column 16, lines 28-29. Fine fusion bonds formed by these methods will inherently leave fine fusion spots on the exterior surface of the wings, since the application of heat or pressure to the wings to form the bonds will alter the exterior surface of the wings in the process. Kline therefore discloses all aspects of the claimed invention.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (703) 306-5716. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on (703) 308-1412. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UA
cla

September 30, 2004

Larry Schwartz

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